UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/668,228	09/22/2000	Motoki Kato	SONY-U0147	9929

			EXAMINER
22850 7590 01/09/2006			TRAN, THAI Q

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 01/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	09/668,228	KATO, MOTOKI
Office Action Summary	Examiner	Art Unit	
	Thai Tran	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>28 October 2005</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5,7-10,12,14-17,19,21,27,29,30,32,33,35-39,41 and 44-47* is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *27,29,30,39 and 41* is/are allowed.

6)☒ Claim(s) *1-3,5,7-10,12,14-17,19,21,32,33,35-38 and 44-47* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 December 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☒ All　b)☐ Some * c)☐ None of:

　　　　1.☒ Certified copies of the priority documents have been received.

　　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments filed Oct. 28, 2005 have been fully considered but they are

not persuasive.

In re pages 14-15, applicant argues, with respect to the rejection of claims 38

and 44-47 under 35 U.S.C. § 101 because, while it is recognized that MPEP § 2106

outlines patentability guidelines for data structures presented in a recording medium

format, this has no bearing on the patentability of Claims 38 and 44-47, which are now

product-by-process claims and that the fact that product-by-process claims recite a

recording medium product does not impact that product-by-process claims are statutory

and the determination as to their patentability is not controlled by MPEP § 2106, IV.B.1.

In response, the examiner respectfully disagrees. MPEP § 2113 states that

"[E]ven though product-by process claims are limited by and defined by the process,

determination of patentability is based on the product itself. The patentability of a

product does not depend on its method of production." It is noted that the product of

Claims 38 and 44-47 is a data recording medium and MPEP § 2106.IV.B.1 states when

non-functional descriptive material is recorded on some computer – readable medium, it

is not structurally and functionally interrelated to the medium but is merely carried by the

medium and merely claiming nonfunctional descriptive material stored in a computer –

readable medium does not make it statutory.

Claim Rejections - 35 USC § 101

2.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3.   Claims 38 and 44-47 are rejected under 35 U.S.C. 101 because claims 38 and

44-47 are directed to a data recording medium storing nonfunctional descriptive

material.

Data structures not claimed as embodied in computer-readable media are

descriptive material per se and are not statutory because they are neither physical

"things" nor statutory processes. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d

at 1760 (claim to a data structure per se held nonstatutory) and merely claiming

nonfunctional descriptive material stored in a computer – readable medium does not

make it statutory. See MPEP 2106 IV B 1.

Response to Arguments

4.   Applicant's arguments with respect to the art rejection of claims have been

considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6.   Claims 1-3, 5, 7-10, 12, 14-17, 19, 21, 32-33, 35-38, and 44-47 are rejected

under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al (US 2004/0047610) in

view of Kawara (US 5,838,872) and further in view of Fujinami et al (US 6,363,212 B1).

Regarding claim 1, Tanaka et al discloses a transport stream recording device

recording device (Fig. 36) for recording input transport streams on a data recording

medium, comprising:

a header attachment section (page 8, paragraph #0124) configured to attach a

header to a transport packet having said transport stream and generating a source

packet. However, Tanaka et al does not specifically disclose "a detector configured to

detect transport packets containing entry points from among said transport packets"; "a

map generator configured to generate an entry point map listing with transport packet

positions containing said entry points"; "a record section configured to record a

predetermined number of said source packets to said data recording medium as aligned

units, and recording said entry point map to said recording medium"; and "wherein the

data length of said aligned units is equivalent to an integer multiple of the sector length

of said data recording medium".

Kawara teaches an image information recording apparatus having a record

section of recording a predetermined specified number of said source packets on said

data recording medium as aligned units (col. 8, lines 40-54) so that the GOP are aligned

with the sectors of the disk and wherein the data length of said aligned units is

equivalent to an integer multiple of the sector length of said data recording medium (col.

8, lines 40-54).

It would have been obvious to one of ordinary skill in the art at the time of the

invention to incorporate the capability of aligning of the GOPs with the sectors of the

disk by adding stuffing bytes as taught by Kawara into Tanaka et al's system in order to facilitate the capability of high-speed reproducing of the DVD player.

The proposed combination of Tanaka et al and Kawara above does not specifically disclose "a detector configured to detect transport packets containing entry points from among said transport packets"; "a map generator configured to generate an entry point map listing with transport packet positions containing said entry points"; and "that the record section records said entry point map to said recording medium".

Fujinami et al teaches an apparatus for recording video signal and entry packets having "a detector configured to detect transport packets containing entry points from among said transport packets" (entry point detector 31 of Fig. 1, col. 4, lines 36-53); "a map generator configured to generate an entry point map listing with transport packet positions containing said entry points" (entry sector generating circuit 32 of Fig. 1, col. 4, lines 36-53); and "that the record section records said entry point map to said recording medium" (digital storage memory 10 of Fig. 1, col. 4, lines 15-31) to reproduce video data from a record medium in high-speed searching modes wherein it is desirable to successively reproduce I-frames occurring at relatively high intervals of time, for example, every 1, 2, 4, etc. seconds, in the bit stream.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the capability of adding of entry packets to the encoded video signal to be recorded as taught by Fujinami et al into Tanaka et al's system in order to reproduce video data form a record medium in high-speed searching modes wherein it

is desirable to successively reproduce I-frames occurring at relatively high intervals of time, for example, every 1, 2, 4, etc. seconds, in the bit stream.

Regarding claim 3, Kawara discloses the claimed wherein the beginning of each said aligned unit is periodically placed in the beginning of a sector (the alignment of the GOP with sectors of the disk disclosed in col. 8, lines 40-54).

Regarding claim 5, Kawara discloses the claimed wherein said sector length is equivalent to a multiple of the data length of said aligned unit (the alignment of the GOP with sectors of the disk disclosed in col. 8, lines 40-54).

Regarding claim 7, Fujinami et al discloses the claimed map generator lists of the addresses of an I picture in said entry point map listing (entry sector generating circuit 32 of Fig. 1, col. 4, lines 36-53) and Tanaka et al also discloses the claimed PTS (page 16, paragraph #0209). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the PTS disclosed in the Tanaka et al in order to increase the quality of the reproduced data because PTS is used for synchronizing purpose.

Method claims 8-10, 12, and 14 are rejected for the same reasons as discussed in the corresponding apparatus claims 1-3, 5, and 7 above.

Program recording medium claims 15-17, 19, and 21 are rejected for the same reasons as discussed in the corresponding apparatus claims 1-3, 5, and 7 above and the microprocessor and the associated programs stored disclosed in col. 17, lines 34-36 of Kawara.

Claim 32 is rejected for the same reasons as discussed n claim 1 above and

Kawara further discloses the claimed classifying means (generating GOP disclosed in

col. 6, lines 27-55) and wherein the data quantity of the aligned unit is equivalent to a

multiple of the data quantity recordable on one sector of said data recording medium

(the alignment of the GOP with sectors of he disk disclosed in col. 8, lines 40-54).

Regarding claim 33, Kawara also discloses counting means (a counter disclosed

in col. 10, lines 22-38) for counting the number of transport packets having said

transport stream; and

null packet generator means (stuffing bytes S disclosed in col. 8, lines 40-54) for

generating null packets according to the count from said counting means.

Regarding claim 35, Fujinami et al discloses the claimed wherein said detecting

means detects transport packets containing I picture data as the transport packet

containing data serving as reproduction start positions (entry point detector 31 of Fig. 1,

col. 4, lines 36-53), and said map generating means writes the count from said counting

means for said transport packets containing said I picture data into the entry point map

(entry sector generating circuit 32 of Fig. 1, col. 4, lines 36-53 and entry packet

disclosed in col. 5, lines 47-67). Tanaka et al also discloses the claimed PTS (page 16,

paragraph #0209). It would have been obvious to one of ordinary skill in the art at the

time of the invention to incorporate the PTS disclosed in the Tanaka et al in order to

increase the quality of the reproduced data because PTS is used for synchronizing

purpose.

Method claim 36 is rejected for the same reasons as discussed in corresponding

apparatus claim 32 above.

Program recording medium claim 37 is rejected for the same reasons as

discussed in the corresponding apparatus claim 32 above and the microprocessor and

the associated programs stored disclosed in col. 17, lines 34-36 of Kawara.

Data recording medium claim 38 is rejected for the same reasons as discussed

in the corresponding apparatus claim 32 above and the recording medium disclosed in

col. 7, lines 51-63 of Kawara.

Regarding claim 44, Kawara also discloses the claimed wherein said source

packet contains null packets (stuffing bytes S disclosed in col. 8, lines 40-54).

Regarding claim 45, Kawara discloses the claimed wherein the beginning of each

of said aligned unit is periodically placed in the beginning of a sector (the aligned GOPs

disclosed in col. 8, lines 40-54).

Regarding claim 46, Kawara discloses the claimed wherein said sector length is

equivalent to an integer multiple of the data length of said aligned unit (the aligned

GOPs disclosed in col. 8, lines 40-54).

Claim 47 is rejected for the same reasons as discussed in claim 38 above.

Allowable Subject Matter

7.   Claims 27, 29-30, 39, and 41 are allowed.

Claims 27, 29-30, 39, and 41 are directed to a transport stream reproduction

device for reproducing the transport stream recorded in aligned units on the recording

medium. Each independent claim identifies the uniquely distinct features "acquiring an
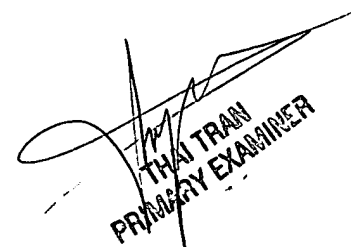
entry point map from said recording medium"; "comparing a PTS listed in said entry point map with a designated reproduction start position"; "searching an entry point nearest to said specified reproduction start position"; and "controlling said reproduction section to read-out transport packets of said transport stream from the address nearest said specified reproduction start position in said recording medium". The closest prior art, Kawara (US 5,838,872) and further in view of Fujinami et al (US 6,363,212 B1) disclose conventional video player, either singularly or in combination, fail to anticipate or render the above underlined limitations obvious.

8.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai Tran whose telephone number is (571) 272-7382. The examiner can normally be reached on Mon. to Friday, 8:00 AM to 5:30 PM.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TTQ